

Lekki schwarzbier

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **21**
- SRM **29.2**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.7 liter(s)**
- Total mash volume **8.9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **6.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	1.5 kg (67.3%)	78 %	6
Grain	Strzegom Pilzneński	0.43 kg (19.3%)	80 %	4
Grain	Extra black	0.13 kg (5.8%)	65 %	1400
Grain	kawowy - Castle Malting	0.17 kg (7.6%)	78 %	500

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	4 g	60 min	11.2 %
Whirlpool	Marynka	18 g	15 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
lager yeast	Lager	Slant	214 ml	Yeast Side Labs